

CLAIMS

1. A device for apply a coating to an optical fiber,
the device including:
 - a die-support,
 - 5 - a grid for applying the coating to the optical fiber,
the grid being made in one piece with the die-support,
and
 - an entry die and an exit die disposed in the die-
support on respective opposite sides of the grid and
10 defining a passage for the optical fiber.
2. The device of claim 1, wherein the entry die is
disposed in a housing of the die-support whose diameter
is greater than the inside diameter of the grid.
3. The device of claim 1, wherein a radial face of the
15 entry die is pressed against a first radial wall of the
die-support.
4. The device of claim 3, wherein a hollow part screwed
into the die-support presses the entry die against the
first radial wall.
- 20 5. The device of claim 1, wherein the exit die is
disposed in a housing of the die-support whose diameter
is greater than the inside diameter of the grid.
6. The device of claim 5, wherein a radial face of the
25 exit die bears against a second radial wall of the die-
support.
7. The device of claim 6, wherein a hollow part screwed
into the die-support presses the exit die against the
second radial wall.
8. The device of claim 1, wherein the outside diameter
30 of the die-support on each side of the grid is greater

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than the outside diameter of the grid.

9. The device of claim 8, wherein $D > \sqrt{(d_i^2 + d_o^2)}$ where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

10. The device of claim 8, wherein $D > 2\sqrt{(d_i^2 + d_o^2)}$ where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

11. An installation for applying a coating to an optical fiber, including a support in which there is disposed a device according to claim 1, the support including means for feeding coating liquid around the grid.

12. The installation of claim 11, wherein a chamber is defined around the grid and is connected to the coating liquid feed means, in which the chamber has a volume greater than the inside volume of the grid.

13. The installation of claim 12, wherein the coating liquid feed means include a plurality of passages discharging radially into the chamber.

14. A die-support including a cylindrical grid of circular inside section made in one piece with the die-support and a receiver on each side of the grid to receive a respective die.

15. The die-support of claim 15, wherein the outside diameter of the die-support on respective opposite sides of the grid is greater than the outside diameter of the grid.

16. The die-support of claim 15, wherein $D > \sqrt{(d_i^2 + d_o^2)}$

where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

17. The die-support of claim 15, wherein $D > 2\sqrt{(d_i^2 + d_o^2)}$
5 where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

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